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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,238	01/29/2004	Kang Soo Seo	1740-000028/US	2909
30593 7590 08/09/2007 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195			EXAMINER DEBELIE, MITIKU W	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/766,238	SEO ET AL.	
	Examiner	Art Unit	
	Mitiku Debelie	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The reference listed in the information disclosure statement filed on 01/29/2004 has been considered by the examiner.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1 – 20 are provisionally rejected on the ground obviousness-type double patenting as being unpatentable over claims 1 – 34 of copending Application NO. 10/766193. Although the conflicting claims are not identical, they are not patentably distinct from each other because both inventions relate to

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managing reproduction of images and related data associated with the images with the related data being graphic data and subtitle data. Both inventions also relate to multiplexing the images and the related associated data into transport stream and packetized elementary streams.

This is a provisional obvious-type double patenting rejection because the conflicting claims have not been patented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. **Claims 1 - 16** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 1 defines a recording medium having a data structure for managing reproduction of data stream recorded on the recording medium. The claimed invention would have been statutory had it been worded to include computer program embedded in a computer readable medium. Computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationship between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 – 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Kanazawa et al. (U.S. Patent Number 6,580,870).

Regarding claim 1, Kanazawa discloses a recording medium having a data structure for managing reproduction of data streams (Fig. 12 STREAM DATA) recorded on the recording medium, comprising: a navigation area (Fig. 16, NAVIGATION DATA 301) storing at least one playitem in a playlist, the playlist including a stream indication field indicating the data streams associated with the playitem (navigation information is presented by PCI and DSI) (see Fig. 16, col. 13, lines 29 - 49).

Regarding claim 2, Kanazawa teaches a recording medium wherein the stream indication field (Fig. 18, VTS1, VTS2, VTSn) indicates packet identifiers (Fig. 18, CELL#1, cell#2).

Regarding claim 3, Kanazawa teaches a recording medium further comprising: a data area (Fig. 18, VOBS) storing a plurality of data streams; and wherein the stream indication field (Fig. 18, CELL) indicates which of the plurality of data streams (N, V, A and are data streams of different type) are associated with the playitem.

Regarding claim 4, Kanazawa teaches a recording medium wherein the data area stores the plurality of data streams as packetized data streams (Fig. 18, CELL#, CELL#2), and each packet includes a packet identifier (Fig. 18, N, V, A); and the stream indication field indicates packet identifiers of the data streams associated with the playitem (see col. 13, lines 31 – 36).

Regarding claim 5, Kanazawa teaches a recording medium wherein the data streams are elementary data streams (N, V, A and S are navigation, video, audio and subtitle individual streams), (see Figs. 3, 18, col. 5, lines 13 – 16).

Regarding claim 6, Kanazawa teaches a recording medium wherein the data area stored elementary streams as transport streams (reproducing stream data includes transporting the stream data which in turn requires the data to be transportable) (see col. 1, lines 8 – 12).

Regarding claim 7, Kanazawa teaches a recording medium wherein the data area stores the data streams multiplexed together (see col. 1, lines 26 - 34).

Regarding claim 8, grounds for rejecting claim 5 apply for claim 8 in its entirety.

Regarding claim 9, grounds for rejecting claim 6 apply for claim 9 in its entirety.

Regarding claim 10, grounds for rejecting claim 7 apply for claim 10 in its entirety.

Regarding claim 11, grounds for rejecting claim 6 apply for claim 11 in its entirety.

Regarding claim 12, grounds for rejecting claim 7 apply for claim 12 in its entirety.

Regarding claim 13, Kanazawa teaches a recording medium wherein the plurality of data streams includes video data streams (see Fig. 18, V).

Regarding claim 14, Kanazawa teaches a recording medium wherein the plurality of data streams includes video data streams and at least one of audio data streams, graphics data streams and subtitle data streams (see Fig. 18, A)

Regarding claim 15, claim 15 recites, "A recording medium having a data structure for managing reproduction of data streams recorded on the recording medium, comprising: a navigation area storing at least one playlist, the playlist including at least one stream indication field indicating the data streams associated with the playlist." This claim reads on claim 1 above.

Regarding claim 16, grounds for rejecting claim 2 apply for claim 16 in its entirety.

Regarding claim 17, this is a method claim corresponding to the apparatus claim. Therefore claim 17 is analyzed and rejected as previously discussed with respect to claim 1.

Regarding claim 18, this claim recites, "A method of reproducing a data structure for managing reproduction of data streams recorded on a recording

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medium, comprising: reproducing at least one playitem in a playlist from the recording medium, the playitem including a stream indication field indicating the data streams associated with the playitem." This claim reads on claim 1 above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monahan (U.S. Pub. No. 2004/0141436) and in view of Kanazawa et al. (U.S. Patent Number 6,580,870).

Regarding claim 19, Monahan discloses an apparatus for recording a data structure for managing reproduction of data streams on a recording medium, comprising: a driver (Fig. 1, write head 155) for driving an optical recording device to record data on the recording medium; a controller (Fig. 1, SYSTEM CONTROLLER 140) for controlling the driver to record.

Monahan however does not teach recording at least one playitem in a playlist on the recording medium, the playitem including a stream indication field indicating the data streams associated with the playitem.

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Kanazawa, from the same field of endeavor, teaches recording at least one playitem (CELL) in a playlist (VOBS) on the recording medium, the playitem including a stream indication field (NAVIGATION PACK) indicating the data streams associated with the playitem (data streams associated with the play item could be navigation data streams PCI and DSI) (see Figs. 12 and 16, column 13, lines 29 – 49).

Regarding claim 20, this claim recites, "An apparatus for reproducing a data structure for managing reproduction of data streams recorded on a recording medium, comprising: a driver for driving an optical reproducing device to reproduce data recorded on the recording medium; a controller for controlling the driver to reproduce at least one playitem in a playlist from the recording medium, the playlist including a stream indication field indicating the data streams associated with the playitem." This claim reads on claim 19 above.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitiku Debelie whose telephone number is (571) 270 1706. The examiner can normally be reached on Mon - Fri 8:00 - 5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on (571) 272 7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD
08/03/2007

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